

A digitally broadcast signal is demodulated and separated in a transport unit 30 before being supplied to the coders. Data from a packet ID included in the digital broadcasting signal is outputted from the transport unit and a broadcasting detecting unit 80 determines whether the received signal is HD or SD in accordance with data on the packet ID. When this unit determines that it is SD broadcasting, an instruction is sent to the transport unit to have a set sub channel displayed and to make an on screen display of the sub channel.

As defined in the claims this “set sub channel results from a setting unit 90 which provides this set sub channel to be initially displayed when the one channel broadcasting is switched to multi-channel broadcasting. Also, claimed is a recording unit for holding the sub channel with the sub channel control unit providing a packet ID corresponding to the sub channel.

Additionally, a memory unit 100 stores a relationship of each of a plurality of sub channels to each of a plurality of packet IDs and a table with a sub channel being defined on a standard definition broadcasting basis.

The reference to Lownes is only concerned with operation of a “multi-program bit stream”. That is, it is only concerned with multiple programs on the channel and not with the switching between High Definition and Standard Definition (one-channel/multi-channel switching), as claimed in the present invention.

According to Lownes, an operator first selects a channel and then selects a program in the channel by way of the program selection device 300, as described in the specification at the bottom of column 6 and the top of column 7 with respect to Figure 6. The two methods of operation include the instance where the viewer only selects a channel without selecting a specific program in which case Lownes automatically selects the program within the channel which has the lowest program number. In the embodiment of Figure 7, a viewer selects a channel and a program select button 314 is pushed if the lowest number program is not the desired program. This involves stepping through the number of programs in the channel by repeatedly pushing the program select button.

According to the statement of the rejection at item 3 on pages 3-5 of the patent Office Action, the broadcasting detecting unit portion of claim 7 and 8 for detecting either HD or SD is shown in column 1, lines 25-34 and column 2, lines 11-17 of Lownes. Applicants submit however that the reference to Lownes '861 merely discusses that the digital television standard indicates that multiple programs can be sent on a single channel using SD program. There is no indication in the reference of the combination of detecting either HD single channel broadcasting or multi-channel broadcasting according to the packet ID and no indication that when the detection is made there is multi-channel broadcasting. The setting unit 90, as claimed, provides a setting for a particular set sub channel, which will be displayed only when the one-channel broadcasting is switched over to the multi-channel broadcasting.

Furthermore, the claim recite that, at the time the switchover takes place and multi-channel broadcasting is indicated, a predetermined packet ID of the set sub channel (set by the setting unit) is read out of the table in the memory unit which stores a relationship of each of the sub channels to a plurality of packet IDs.

Subsequently, the sub channel control unit which has read out this predetermined packet sends a broadcasting signal including this packet ID to the transport unit 30 for the on screen display.

It is submitted that the combination of the table, which stores all of the associated sub channels with the packet ID, and a setting which only functions in combination with that setting only when switching occurs between single channel and multiple-channel, is not available from the reference to Lownes or the newly-cited secondary reference to Ozkan, even accepting the statement of the Examiner for the showing of Ozkan.

The reference to Ozkan concerns a transmitter and it is submitted that it is not obvious to modify the primary reference to Lownes for a receiving television signal with the teaching of Ozkan concerning a transmitter. Additionally, even if, only for purposes of argument, such combination could be made, Applicants submit that the present invention as discussed above defines

over the references with respect to the relationship between the setting unit for setting the set sub channel to be displayed when the system is switched over to multi-channel broadcasting and the detection of the switching from one channel to multi-channel broadcasting according to a packet ID. These features are not available from the references or their combination especially with respect to the relationship between and the outputting of signals, as claimed between the broadcasting detecting unit 80 that transport unit 30 and the memory having the table of relationships. It is to be noted that the reference to Lownes requires a selection of not only a channel, but also a program within the channel so that it is a two-step process, whereas the present invention allows for the selection of one of the sub channels directly because it is only operational when the switching has occurred between single-channel and multi-channel broadcasting.

Because each of independent claims 7 and 8 contain the above limitations with respect to the determination of single-channel or multi-channel broadcasting and the reading out from a table of a predetermined packet ID of a set sub channel when it is determined that the digital broadcasting signal is transmitted, Applicants submit that this application contains limitations not available from the references or their combination. Accordingly, the allowance of this application containing claims 3, 4, 7 and 8 is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038849.47927).

Respectfully submitted,



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